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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/607,871 42390P8695 9971 06/30/2000 Borys S. Senyk EXAMINER 7590 03/29/2005 Carol F. Barry MCKINNON, TERRELL L BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP PAPER NUMBER ART UNIT

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLF 7th Floor 12400 Wilshire Boulevard Los Angeles, CA 90025

3743

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SW

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions from many be arising the development of 3°CPR 1.736(a). In no event, however, may a reply be timely filled Extensions from many be arising the development of 3°CPR 1.736(a). In no event, however, may a reply be timely filled If the period for reply specified above, be maximum of 3°CPR 1.736(a). In no event, however, may a reply be timely filled If the period for reply specified above, be maximum of 3°CPR 1.736(b). If the period for reply specified above, be maximum statishop period will specify and will expire \$100 (b) MONTHS from the malling date of this communication. Find period for reply is specified above, be maximum statishop period will specify and will expire \$100 (b) MONTHS from the malling date of this communication. Find period for reply specified above, be maximum statishop period will place and the communication. Find period for reply specified and specif		Application No.	Applicant(s)	
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2a) This action is FINAL. 2b) This action is non-final. 3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-5,7-13.15,17-24 and 26-30 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s)	Status			
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DETAILED ACTION

Receipt is acknowledged of applicant's request for Continued Examination filed June 4, 2004. Claims 1-5, 7-13, 15, 17-24 and 26-30 are pending and an action on the merits is as follows.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-5, 8-13, 15, 18-22, 24, 26-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohashi et al. (U.S. 5,764,483) in view of Bausch et al. (U.S. 6,191,546).

Ohashi discloses a cooling unit and method for electronic equipment comprising:

- coupling a first heat transfer plate (14) to an electronic device (12) in a
 first part of a portable computing device (10);
- a second heat transfer plate (16 and 36) in a second part of the computing device (8) coupled to the first heat transfer plate;
- a close loop flexible (plastic, rubber) tube (18) that fluidly joins the first
 and second heat transfer plates together;
- the use of a heat transfer medium (water, oil, liquid refrigerant);

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- the use of a pump (40) coupled to the tube, wherein it would have been obvious to one of ordinary skill in the art at the time of the invention for the pump to circulate the heat transfer fluid at a rate of 1 milliliter/second to 10 milliliter/second to efficiently cooling the electronic components;
- the use of a disconnect connection (44a and 44b);
- the heat transfer plate comprises a plate-fin type liquid heat transfer plate; and
- the use of extensively dissipating heat (10 watts to 50 watts) at high capacities from the heat radiating plate (column 2, lines 45-50).

Ohashi fails to disclose sensing the temperature of the electronic device and causing the fluid to move when the threshold temperature is detected.

- 3. However, Bausch teaches the use of cooling a notebook computer comprising:
 - a temperature sensor that senses the temperature of the electronic device, which activates a cooling device to operate when the threshold temperature is, detected (column 9, lines 50-55; column 2, lines 19-31, and column 10, lines 44-46).

Given the teachings of Bausch, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cooling unit of Ohashi with a temperature sensor that sensing the temperature of the electronic device, and initiates fluid movement when the threshold temperature is detected.

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Doing so would improve the cooling performance and provide an optimal condition for cooling electronic devices within notebook computers.

Allowable Subject Matter

Claims 7, 17, 23 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrell L Mckinnon whose telephone number is 571-272-4797. The examiner can normally be reached on Monday -Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free).

Terrell L Mckinnon Primary Examiner Art Unit 3743

March 24, 2005